



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,797	03/26/2004	Chikara Ohki	70456-025	7147
20277	7590	06/13/2008	EXAMINER	
MCDERMOTT WILL & EMERY LLP			CHARLES, MARCUS	
600 13TH STREET, N.W.			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005-3096			3682	
MAIL DATE		DELIVERY MODE		
06/13/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/809,797	Applicant(s) OHKI ET AL.
	Examiner Marcus Charles	Art Unit 3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 February 2008.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the amendment filed 10/809,797, which has been entered.

Claims 1-24 are currently pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawashima et al. (4,867,649) in view of Kiuchi et al. (6,065,343) Kawashima et al. disclose the claimed invention, including a compressor component (25) incorporated into a compressor having a compressor body (28), a bearing (not labeled), a pulley mechanism (not labeled). Kawashima et al. fail to disclose the bearing component having an austenite grain with a grain size number failing within a range exceeding 10. Kawashima et al. disclose a bearing comprising a bearing ring component having an austenite grain of 8 or higher in order to improve stabilization (see col. 2, lines 55-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bearing component of Kawashima et al. so that it is made of an austenite material having an austenite grain size of 8 or higher in view of Kiuchi et al. in order to increase stabilization, fatigue life, increase anti crack strength and increase life at high temperature. Although Kiuchi et al. fail to actually teach the grain size exceeds 10. The grain size 10 falls within the range of 8 or higher. it would have been obvious to

one of ordinary skill in the art at the time of the invention to include a grain size exceeding 10, since it has been held that where the general conditions of a claim is disclosed in the prior art, discovering the optimum ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

In addition, Kawashima et al. fails to disclose the component having a fracture value of at least 2650 MPa and a fracture of at most 0.5ppm. There is reasons to believe, base on the similarity of (structure etc.) that the functional limitation (s) of the fracture value being 2650 MPa and the hydrogen content of 0.5 ppm restricted is (an) inherent characteristic (s) of (the prior art). In re accordance with In re Best, 562F.2d 1252, 195 USPQ 430, 433 (CCPA 1977).

This "burden of rebutting [may be of] the PTO's reasonable assertion of inherency under 35 USC 102, or of prima facie obviousness under 35 USC 103" (195 USPQ at 432).

Accordingly, the burden is placed upon the applicant to prove that the limitation (s) in question is/are not (an) inherent characteristic (s) of the reference disclosure.

In claims 5, 12-13 and 19, note the swash plate (12) support bearing (25) supporting the swash-plate.

In claim 6, 15 and 20, note the bearing (25) is a needle roller thrust bearing.

In claims 7-8 and 14, note the pulley support bearing (95/47) which is needle bearing.

In claims 9-10), note the bearing (95/47) is a shaft support bearing.

In claims 16-17, the claimed invention is disclosed above.

In claims 18-24, Kawashima et al. (4,867,649) in view of JP (61-177327) to Ono et al. clearly disclose the claim invention above.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-11 of US Copending Application No. 10/300,590 in view of Kawashima et al. (4,867,649). US Copending Application No. 10/300,590 discloses a bearing component having an austenite grain size number falling within an exceeding range of 10 and having an hydrogen content of not greater than 0.5 ppm. US Copending Application No. 10/300,590 does not disclose the bearing component is a compressor bearing

Art Unit: 3682

component. Kawashima et al. disclose the compressor including a compressor component such as a swash plate supported by a needle bearing roller (25), incorporated into a compressor having a compressor body (28), a bearing component (21/25/41), a pulley mechanism (not labeled). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bearing of US Copending Application No. 10/300,590 so that it can be used on the compressor of Kawashima et al. in order to provide greater stability and wear resistance, increase fatigue life, increase anti crack strength and increase life at high temperature.

Regarding claim 2, In addition, US Copending Application No. 10/300,590 in view of Kawashima et al. fail to disclose the component having a fracture value of at least 2650 MPa and a fracture of at most 0.5ppm. There is reasons to believe, base on the similarity of (structure etc.) that the functional limitation (s) of the fracture value being 2650 MPa restricted is (an) inherent characteristic (s) of (the prior art). In re accordance with In re Best, 562F.2d 1252, 195 USPQ 430, 433 (CCPA 1977).

Regarding claims 6-24, Kawashima et al. disclose the claimed invention as in paragraph 2 above.

This is a provisional obviousness-type double patenting rejection.

5. Claims 1-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,296,933 in view of Kawashima et al. (4,867,649). U.S. Patent No. 7,296,933 discloses a bearing component having an austenite grain size number falling within an exceeding range of 10 but fails to disclose the bearing component is a compressor bearing component.

Kawashima et al. disclose the compressor including a compressor component such as a swash plate supported by a needle bearing roller (25), incorporated into a compressor having a compressor body (28), a bearing component (21/25/41), a pulley mechanism (not labeled). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the bearing of U.S. Patent No. 7,296,933 so that it can be used on the compressor of Kawashima et al. in order to provide greater stability and wear resistance, increase fatigue life, increase anti crack strength and increase life at high temperature.

In addition, U.S. Patent No. 7,296,933 fails to disclose the component having a fracture value of at least 2650 MPa and a fracture of at most 0.5ppm. There is reasons to believe, base on the similarity of (structure etc.) that the functional limitation (s) of the fracture value being 2650 MPa and the hydrogen content of 0.5 ppm restricted is (an) inherent characteristic (s) of (the prior art). In accordance with In re Best, 562F.2d 1252, 195 USPQ 430, 433 (CCPA 1977).

In claim 6, 15 and 20, note the bearing (25) is a needle roller thrust bearing.

In claims 7-8 and 14, note the pulley support bearing (95/47) which is needle bearing.

In claims 9-10), note the bearing (95/47) is a shaft support bearing.

In claims 16-17, the claimed invention is disclosed above.

In claims 18-24, U.S. Patent No. 7,296,933 in view of Kawashima et al. clearly discloses the claim invention above.

Response to Arguments

6. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marcus Charles
/Marcus Charles/
Primary Examiner, Art Unit 3682